

```

USER@Ruhaan-Abrar MINGW64 ~/Downloads
$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/USER/.ssh/id_rsa):
/c/Users/USER/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/USER/.ssh/id_rsa
Your public key has been saved in /c/Users/USER/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:mid6IZlYHKgw+/E6ZkBgwS+p1PJc8Kmf2uAj6EA1qDE USER@Ruhaan-Abrar
The key's randomart image is:
+---[RSA 3072]---+
|...
|.o
|Eo==.
|+X+o=
|B*+=. S
|=*=.o. o
|O +o oo
|++ .B+
|.o*+o
+---[SHA256]-----+

USER@Ruhaan-Abrar MINGW64 ~/Downloads
$ ssh -i challenge.pem ec2-user@54.227.51.26
The authenticity of host '54.227.51.26 (54.227.51.26)' can't be established.
ED25519 key fingerprint is SHA256:6Q08mFYMTqw9qOyGaVb3hAg+dASSoyAv8DdwLbuzByE.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '54.227.51.26' (ED25519) to the list of known hosts.

#_
~\##### Amazon Linux 2
~~~\#####
~~~\###|
~~~\#/
~~~V~'~>
~~~~
~~~~..
~~~~/_/~/
~/m/'~

AL2 End of Life is 2026-06-30.

A newer version of Amazon Linux is available!

Amazon Linux 2023, GA and supported until 2028-03-15.
https://aws.amazon.com/linux/amazon-linux-2023/

13 package(s) needed for security, out of 14 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-28-216 ~]$ |

```

## Docker installation

```
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : runc-1.2.4-1.amzn2.x86_64 1/5
Installing : containerd-1.7.27-1.amzn2.0.2.x86_64 2/5
Installing : libcgrou-0.41-21.amzn2.x86_64 3/5
Installing : pigz-2.3.4-1.amzn2.0.1.x86_64 4/5
Installing : docker-25.0.8-1.amzn2.0.2.x86_64 5/5
Verifying : runc-1.2.4-1.amzn2.x86_64 1/5
Verifying : pigz-2.3.4-1.amzn2.0.1.x86_64 2/5
Verifying : libcgrou-0.41-21.amzn2.x86_64 3/5
Verifying : docker-25.0.8-1.amzn2.0.2.x86_64 4/5
Verifying : containerd-1.7.27-1.amzn2.0.2.x86_64 5/5

Installed:
  docker.x86_64 0:25.0.8-1.amzn2.0.2

Dependency Installed:
  containerd.x86_64 0:1.7.27-1.amzn2.0.2      libcgrou.x86_64 0:0.41-21.amzn2      pigz.x86_64 0:2.3.4-1.amzn2.0.1      runc.x86_64 0:1.2.4-1.amzn2

Complete!
[root@ip-172-31-28-216 ~]# sudo systemctl start docker
[root@ip-172-31-28-216 ~]# sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; vendor preset: disabled)
   Active: active (running) since Sat 2025-04-19 17:05:30 UTC; 6s ago
     Docs: https://docs.docker.com
    Process: 3546 ExecStartPre=usr/libexec/docker/docker-setup-runtimes.sh (code=exited, status=0/SUCCESS)
    Process: 3545 ExecStartPre=bin/mkdir -p /run/docker (code=exited, status=0/SUCCESS)
   Main PID: 3549 (dockerd)
      Tasks: 7
     Memory: 28.9M
    CGroup: /system.slice/docker.service
            └─3549 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock --default-ulimit nofile=32768:65536

Apr 19 17:05:29 ip-172-31-28-216.ec2.internal systemd[1]: Starting Docker Application Container Engine...
Apr 19 17:05:29 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:29.854017951Z" level=info msg="Starting up"
Apr 19 17:05:29 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:29.894501539Z" level=info msg="Loading containers: start."
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:30.084683692Z" level=info msg="Loading containers: done."
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:30.098758309Z" level=warning msg="WARNING: bridge-nf-call-iptables is disabled"
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:30.098983016Z" level=warning msg="WARNING: bridge-nf-call-ip6tables is disabled"
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:30.099006469Z" level=info msg="Docker daemon" commit=71907ca containerd-snap...on=25.0.8
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:30.099061563Z" level=info msg="Daemon has completed initialization"
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal dockerd[3549]: time="2025-04-19T17:05:30.129160391Z" level=info msg="API listen on /run/docker.sock"
Apr 19 17:05:30 ip-172-31-28-216.ec2.internal systemd[1]: Started Docker Application Container Engine.
Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-172-31-28-216 ~]#
```

Jenkins

```
Verifying : python-javapackages-3.4.1-11.amzn2.noarch 24/28
Verifying : libxtest-1.2.3-1.amzn2.0.2.x86_64 25/28
Verifying : alsa-lib-1.1.4-1-2.amzn2.x86_64 26/28
Verifying : libICE-1.0.9-9.amzn2.0.2.x86_64 27/28
Verifying : javapackages-tools-3.4.1-11.amzn2.noarch 28/28

Installed:
  java-17-amazon-corretto.x86_64 1:17.0.14+7-1.amzn2.1

Dependency Installed:
  alsa-lib.x86_64 0:1.1.4-1-2.amzn2      dejavu-fonts-common.noarch 0:2.33-6.amzn2      dejavu-sans-fonts.noarch 0:2.33-6.amzn2
  dejavu-sans-mono-fonts.noarch 0:2.33-6.amzn2  glib1b.x86_64 0:4.1.6-9.amzn2.0.2      fontconfig.x86_64 0:2.13.0-4.3.amzn2
  fontpackages-filesystem.noarch 0:1.44-8.amzn2  libICE.x86_64 0:1.0.9-9.amzn2.0.2      java-17-amazon-corretto-headless.x86_64 1:17.0.14+7-1.amzn2.1
  javapackages-tools.noarch 0:3.4.1-11.amzn2  libX11.x86_64 0:1.6.7-3.amzn2.0.5      libSM.x86_64 0:1.2.2-2.amzn2.0.2
  libX11.x86_64 0:1.6.7-3.amzn2.0.5      libXau.x86_64 0:1.0.8-2.1.amzn2.0.2
  libXext.x86_64 0:1.3.3-3.amzn2.0.2      libXl.x86_64 0:1.7.9-1.amzn2.0.2
  libXrandr.x86_64 0:1.5.1-2.amzn2.0.3      libXrender.x86_64 0:0.9.10-1.amzn2.0.2
  libXtst.x86_64 0:1.2.3-1.amzn2.0.2      libxcb.x86_64 0:1.12-1.amzn2.0.2
  log4j-cve-2021-44228-hotpatch.noarch 0:1.3-7.amzn2  python-javapackages.noarch 0:3.4.1-11.amzn2
  python-lxml.x86_64 0:3.2.1-4.amzn2.0.7

Complete!
[root@ip-172-31-28-216 ~]#
```

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing: jenkins	noarch	2.492.3-1.1	jenkins	92 M

Transaction Summary


Install 1 Package

Total download size: 92 M  
Installed size: 92 M  
Downloading packages:  
jenkins-2.492.3-1.1.noarch.rpm | 92 MB 00:00:02

Running transaction check  
Running transaction test  
Transaction test succeeded  
Running transaction  
Installing : jenkins-2.492.3-1.1.noarch 1/1  
Verifying : jenkins-2.492.3-1.1.noarch 1/1

Installed:  
jenkins.noarch 0:2.492.3-1.1

Complete!  
[root@ip-172-31-28-216 ~]#



# Jenkins

Dashboard

+ New Item

Build History

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

0/2

✖

Built-In Node

offline

Search

Notifications

Security

shameel

log out

## Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

### Start building your software project

Create a job

+

### Set up a distributed build

Set up an agent

Configure a cloud

Learn more about distributed builds

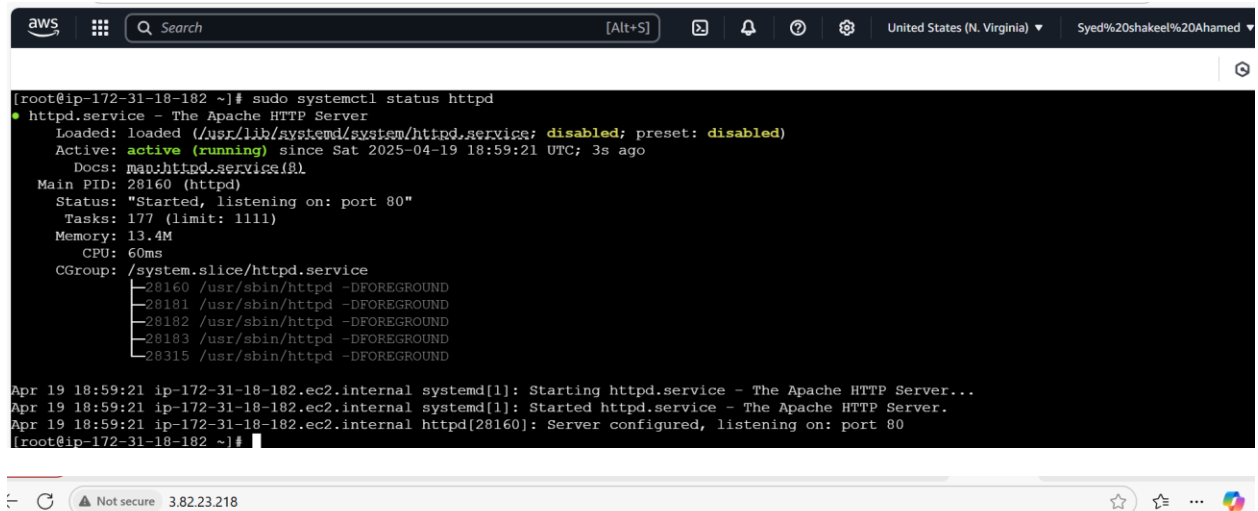
```

aws [Alt+S] United States (N. Virginia) Syed%20shakeel%20Ahamed
Active: active (running) since Sat 2025-04-19 18:42:24 UTC; 3s ago
Main PID: 26843 (java)
Tasks: 40 (limit: 1111)
Memory: 351.1M
CPU: 15.202s
CGroup: /system.slice/jenkins.service
└─26843 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Apr 19 18:42:18 ip-172-31-18-182.ec2.internal jenkins[26843]: e44129b63a7e4206ad69bbd4b8ac6124
Apr 19 18:42:18 ip-172-31-18-182.ec2.internal jenkins[26843]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Apr 19 18:42:18 ip-172-31-18-182.ec2.internal jenkins[26843]: *****
Apr 19 18:42:18 ip-172-31-18-182.ec2.internal jenkins[26843]: *****
Apr 19 18:42:18 ip-172-31-18-182.ec2.internal jenkins[26843]: *****
Apr 19 18:42:24 ip-172-31-18-182.ec2.internal jenkins[26843]: 2025-04-19 18:42:24.531+0000 [id=30] INFO jenkins.InitReactor
Apr 19 18:42:24 ip-172-31-18-182.ec2.internal jenkins[26843]: 2025-04-19 18:42:24.566+0000 [id=23] INFO hudson.lifecycle.Lifecycle
Apr 19 18:42:24 ip-172-31-18-182.ec2.internal systemd[1]: Started jenkins.service - Jenkins Continuous Integration Server.
Apr 19 18:42:24 ip-172-31-18-182.ec2.internal jenkins[26843]: 2025-04-19 18:42:24.856+0000 [id=46] INFO h.m.DownloadService
Apr 19 18:42:24 ip-172-31-18-182.ec2.internal jenkins[26843]: 2025-04-19 18:42:24.856+0000 [id=46] INFO hudson.util.Retrier
[root@ip-172-31-18-182 ~]# cat /var/lib/jenkins/secrets/initialAdminPassword
e44129b63a7e4206ad69bbd4b8ac6124
[root@ip-172-31-18-182 ~]#

```

## Apache HTTP Server



NGINX

aws

Search

[Alt+S]

United States (N. Virginia)

```
[root@ip-172-31-18-182 nginx]# sudo systemctl start nginx
[root@ip-172-31-18-182 nginx]# sudo systemctl status nginx
● nginx.service - The nginx HTTP and reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; disabled; preset: disabled)
   Active: active (running) since Sat 2025-04-19 19:21:33 UTC; 9s ago
     Process: 30548 ExecStartPre=/usr/bin/rm -f /run/nginx.pid (code=exited, status=0/SUCCESS)
     Process: 30549 ExecStartPre=/usr/sbin/nginx -t (code=exited, status=0/SUCCESS)
     Process: 30550 ExecStart=/usr/sbin/nginx (code=exited, status=0/SUCCESS)
    Main PID: 30551 (nginx)
       Tasks: 2 (limit: 1111)
      Memory: 2.5M
         CPU: 44ms
    CGroup: /system.slice/nginx.service
            └─30551 "nginx: master process /usr/sbin/nginx"
              └─30552 "nginx: worker process"

Apr 19 19:21:33 ip-172-31-18-182.ec2.internal systemd[1]: Starting nginx.service - The nginx HTTP and reverse proxy ser
Apr 19 19:21:33 ip-172-31-18-182.ec2.internal nginx[30549]: nginx: the configuration file /etc/nginx/nginx.conf syntax
Apr 19 19:21:33 ip-172-31-18-182.ec2.internal nginx[30549]: nginx: configuration file /etc/nginx/nginx.conf test is suc
Apr 19 19:21:33 ip-172-31-18-182.ec2.internal systemd[1]: Started nginx.service - The nginx HTTP and reverse proxy serv
[root@ip-172-31-18-182 nginx]#
```

Sign in

Laun: x

Laun: x

Insta: x

EC2 I: x

Docu: x

dock: x

Welc: x

Dash: x

Copy: x

Welc: x

+

-

x

Not secure 3.82.23.218:820

## Welcome to nginx!



**Nginx is used to deploy the static content and it can be used as Load balancer without any extra configuration**




If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to [nginx.org](https://nginx.org).  
Commercial support is available at [nginx.com](https://nginx.com).

*Thank you for using nginx.*

Apache Tomcat

United States (N. Virginia) ▾

Syed%20shakeel%20Ahmed ▾

catalina.sh

configtest.bat

makebase.bat

shutdown.sh

tool-wrapper.bat

ciphers.bat

configtest.sh

makebase.sh

startup.bat

tool-wrapper.sh

```

[root@ip-172-31-18-182 bin]# ./startup.sh
Using CATALINA_BASE:   /root/tomcat/apache-tomcat-9.0.104
Using CATALINA_HOME:   /root/tomcat/apache-tomcat-9.0.104
Using CATALINA_TMPDIR: /root/tomcat/apache-tomcat-9.0.104/temp
Using JRE_HOME:        /usr
Using CLASSPATH:        /root/tomcat/apache-tomcat-9.0.104/bin/bootstrap.jar:/root/tomcat/apache-tomcat-9.0.104/bin/tomcat-juli.jar
Tomcat started.
[root@ip-172-31-18-182 bin]# ps -ef | grep 8080
root      59840   57411   0 03:37 pts/1    00:00:00 grep --color=auto 8080
[root@ip-172-31-18-182 bin]# ps -ef | grep 8080 -l
(standard input)
[root@ip-172-31-18-182 bin]# netstat -na | grep LISTEN
tcp        0      0 0.0.0.0:8080          0.0.0.0:*             LISTEN
tcp        0      0 0.0.0.0:80            0.0.0.0:*             LISTEN
tcp6       0      0 :::80                 :::*                   LISTEN
tcp6       0      0 127.0.0.1:8005        :::*                   LISTEN
tcp6       0      0 :::22                 :::*                   LISTEN
tcp6       0      0 :::8081                :::*                   LISTEN

```

i-0a40c6605ec6173f6 (Webserver\_test)

PublicIPs: 3.82.23.218 PrivateIPs: 172.31.18.182

←

↺

Not secure

3.82.23.218:8081

☆

Home

Documentation

Configuration


Examples

Wiki

Mailing Lists

Find Help


# Apache Tomcat/9.0.104



SOFTWARE FOUNDATION

http://www.apache.org/

If you're seeing this, you've successfully installed Tomcat. Congratulations!



Recommended Reading:

[Security Considerations How-To](#)
[Manager Application How-To](#)
[Clustering/Session Replication How-To](#)

Server Status

Manager App

Host Manager

Developer Quick Start

[Tomcat Setup](#)
[First Web Application](#)

[Realms & AAA](#)
[JDBC DataSources](#)

[Examples](#)
[Servlet Specifications](#)
[Tomcat Versions](#)

Managing Tomcat

For security, access to the [manager webapp](#) is restricted. Users are defined in:

\$CATALINA\_HOME/conf/tomcat-users.xml

In Tomcat 9.0 access to the manager application is split between different users.

Documentation

[Tomcat 9.0 Documentation](#)

[Tomcat 9.0 Configuration](#)

[Tomcat Wiki](#)

Find additional important configuration

Getting Help

[FAQ and Mailing Lists](#)

The following mailing lists are available:

tomcat-announce

Important announcements, releases, security vulnerability notifications. (Low volume).